

Before the  
Federal Communications Commission  
Washington, D.C.

In the Matter of	)	RM-11306
Petition For Rule Making	)	
Amendment of Part 97 of FCC Amateur Service	)	
Rules for "Regulation By Bandwidth"	)	

Comments of James P. Miccolis, N2EY

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Introduction

I am submitting these comments in response to RM-11306, to oppose the proposed changes to "regulation by bandwidth" in the Amateur Radio Service.

I am an electrical engineer with BSEE and MSEE degrees from the University of Pennsylvania and Drexel University, respectively, and am employed full time in the design of control systems for the transportation industry. I am coinventor of US Patent 5,358,202. I am also an amateur radio operator, first licensed by the Commission in 1967, and currently hold an Amateur Extra class license. My interest in amateur radio at an early age led me to pursue a career in electrical engineering.

I oppose the changes proposed by the American Radio Relay League (ARRL) in RM-11306. Although there may be some merit in the overall concept, the changes proposed by ARRL contain too many problems to be acceptable. I am a long time member of the ARRL (38 years) and I am disappointed at the content of this proposal.

The following are reasons to deny the proposals contained in RM-11305

Reason 1: It's Not Just "Regulation By Bandwidth"

Although promoted as a conversion from mode-based to bandwidth-based regulation, RM-11306 goes far beyond what the title suggests, changing the rules for semi-automatic ("robot") operation and extensively widening the "phone" subbands. RM-11306 also includes an exception from the regulation-by-bandwidth rules for AM voice operation. It is not clear why a data emission greater than 3.5 kHz bandwidth is unacceptable but an AM voice transmission of double that bandwidth or more would be acceptable in the same subbands.

## Reason 2: Spectrum Efficiency

The separation of narrow- and wide-bandwidth modes by regulation offers radio amateurs a clear incentive to develop and utilize spectrum-efficient modes. Modes such as CW and PSK31 use a tiny fraction of the spectrum required for AM or SSB voice, and so permit more amateurs to enjoy a given band simultaneously. If much of the spectrum currently reserved for such spectrum-efficient modes is opened to wide-bandwidth modes as well, that incentive is reduced. RM-11306 drastically reduces the spectrum space reserved for spectrum-efficient narrow-bandwidth modes, and so reduces the efficient use of the available amateur HF bands.

## Reason 3: Semi-automatic Operation

Current FCC rules allow automatic and semi-automatic digital operation on specified sections of the various HF bands. These rules effectively control possible interference from 'robot' stations without unduly reducing the effectiveness of automatic and semi-automatic operation. RM-11306 would eliminate this control over semi-automatic operation. Since many of the digital modes used in semiautomatic operation are not decodeable by amateur stations not equipped for the specific mode in use, identification of interfering automatic stations will be impractical.

That the semi-automatic station would only transmit in response to an inquiry from a manually controlled station does not adequately address the problems inherent in 'robot' operation on HF. While a frequency may seem unoccupied to the manually operated station, the responding 'robot' may still be a source of interference to stations using the frequency.

Confining automatic and semi-automatic operation to special subbands, as currently provided by FCC rules in part 97.221, is the best way to minimize such interference problems.

## Conclusion

I urge the Commission to deny all proposed changes of RM-11306 without further action.

Respectfully submitted,

James P. Miccolis

